AMENDMENTS TO THE CLAIMS

1. **(Currently Amended)** A field interpolation method determination device ~~(6,8a)~~ for determining whether to perform either an inter-field interpolation method or an intra-field interpolation method on fields of an inputted interlaced signal ~~(Vin)~~ to provide conversion to a progressive signal ~~(Vpr)~~, the device comprising:

pixel level difference detection means ~~(6,81)~~ for detecting a pixel level difference ~~(SpA)~~ between the input interlaced signal ~~(Vin)~~ and a 1-field delay input interlaced signal ~~(Vd1)~~ obtained by delaying the input interlaced signal ~~(Vin)~~ by one field;

field correlation detection means ~~(6,81,82,83,84)~~ for detecting correlation between the input interlaced signal ~~(Vin)~~ and the 1-field delay input interlaced signal ~~(Vd1)~~ based on the pixel level difference ~~(SpA)~~, and outputting inter-field correlation determination signals ~~(Df)~~;

inter-field correlation storage means ~~(85,86,87,88)~~ for storing N-1 inter-field correlation determination signals ~~(Df,R1,R2,R3,R4)~~ corresponding to N sequential fields of the input interlaced signal;

field/frame correlation determination means ~~(89,90)~~ for determining, based on a pattern of values ~~(R1,R2,R3,R4)~~ of the N-1 inter-field correlation determination signals, whether the N sequential fields are either 2-2 or 2-3 pulldown-converted; ~~and~~

counter means for incrementing a count value by one count if the N sequential fields are determined to have been either 2-2 or 2-3 pulldown-converted, for resetting the count value if the N sequential fields are determined to have been neither 2-2 nor 2-3 pulldown-converted, and for maintaining the count value if otherwise; and

interpolation method determination means ~~(91)~~ for determining, as an interpolation

method, inter-field interpolation if the <u>count value is greater than a predetermined value,</u> ~~fields are determined to have been either 2-2 or 2-3 pulldown-converted,~~ or intra-field interpolation if the ~~fields are determined to have been neither 2-2 nor 2-3 pulldown-converted~~ <u>count value is less than or equal to the predetermined value</u>.

2-5. (Canceled)

6. (Currently Amended) A field interpolation method determination device ~~(6,8a)~~ according to claim 1, wherein if the input interlaced signal ~~(Vin)~~ is [[a]] 2-3 pulldown-converted, N is equal to or more than 6.

7. (Currently Amended) A field interpolation method determination device ~~(6,8a)~~ according to claim 1, wherein if the input interlaced signal ~~(Vin)~~ is [[a]] 2-2 pulldown-converted, N is equal to or more than 5.

8. (Currently Amended) A field interpolation method determination device ~~(6,8a)~~ according to claim 1, wherein if at least two sequential signals among the N-1 inter-field correlation determination signals ~~(R1,R2,R3,R4)~~ indicate absence of correlation, the field/frame correlation determination means ~~(89,90)~~ determines that the <u>N sequential fields of the</u> input interlaced signal have been neither 2-2 nor 2-3 pulldown-converted.

9. (Currently Amended) A field interpolation method determination device ~~(6,8a)~~

according to claim 1, wherein if the N-1 inter-field correlation determination signals (R1,R2,R3,R4) alternately indicate presence and absence of correlation, the field/frame correlation determination means (89,90) determines that the <u>N sequential fields of the</u> input interlaced signal have been either 2-2 or 2-3 pulldown-converted.

      10. (Currently Amended) A field interpolation method determination device (6,8a) according to claim 1, wherein the field correlation detection means (6,81,82,83,84) includes:

             pixel difference determination means (82) for determining for each pixel whether the pixel signal level difference (SpA) is greater than a first threshold (X) which indicates a predetermined pixel level and outputting a pixel unit level difference determination result (Dp) represented by a binary value;

             field unit level difference determination means (83) for adding one field to the pixel unit level difference determination result (Dp), and outputting a field unit level difference determination result (CDp); and

             inter-field correlation determination means (84) for determining whether inter-field correlation is significant based on whether the field unit level difference determination result (CDp) is greater than a second threshold (Y) indicating a predetermined number of pixels.

      11. (Currently Amended) A field interpolation method determination device (6,8a) according to claim 10, wherein

             the inter-field difference determination means (6,81,82,83,84) further includes:

             signal level detection means (94b) for detecting a signal level (PL) indicating

brightness of an image represented by the 1-field delay input interlaced signal ~~(Vd1)~~; and

  first threshold change means ~~(95b)~~ for changing the first threshold ~~(Xb)~~ based on a value of the signal level ~~(PL)~~.

  12. (Currently Amended) A field interpolation method determination device ~~(6,8a)~~ according to claim 10, wherein

  the inter-field difference determination means ~~(6,81,82,83,84)~~ further includes:

  signal level detection means ~~(94b)~~ for detecting a signal level ~~(PL)~~ indicating brightness of an image represented by the 1-field delay input interlaced signal ~~(Vd1)~~; and

  second threshold change means for changing the second threshold ~~(Y)~~ based on a value of the signal level ~~(PL)~~.

  13. (Currently Amended) A field interpolation method determination device ~~(6,8c,10)~~ according to claim 1, wherein

  the inter-field difference determination means ~~(6,81,82,83,84)~~ further includes:

  field identification means ~~(10)~~ for outputting, based on the 1-field delay input interlaced signal ~~(Vd1)~~, a field identification signal ~~(Doe)~~ which indicates whether a field of the 1-field delay input interlaced signal ~~(Vd1)~~ is an even field or an odd field; and

  an AND circuit ~~(96c)~~ for calculating a logical product ~~(Dfa)~~ of the field identification signal ~~(Doe)~~ and the inter-field correlation determination signal ~~(Df)~~, and outputting the product to the inter-field difference storage means ~~(85-88)~~.

14. (Currently Amended) A field interpolation method determination device ~~(6,8e,10,22d,24d)~~ according to claim 13, wherein the inter-field difference determination means ~~(6,81,82,83,84)~~ further includes:

an inverter ~~(22d)~~ for outputting a reversed signal ~~(nDoe)~~ of the field identification signal ~~(Doe)~~; and

a field identification signal reverse switch ~~(24d)~~ for selectively outputting either the field identification signal ~~(Doe)~~ or the reversed signal ~~(nDoe)~~ to the AND circuit ~~(96e)~~.